

Figure 2. Gene conversion pathway (nonreciprocal recombination) for obtaining “deletion derivatives”

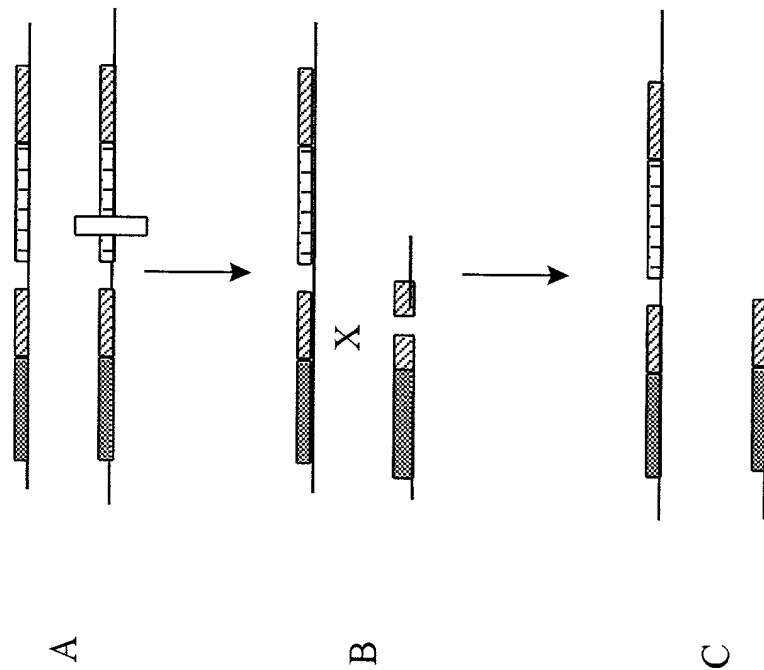
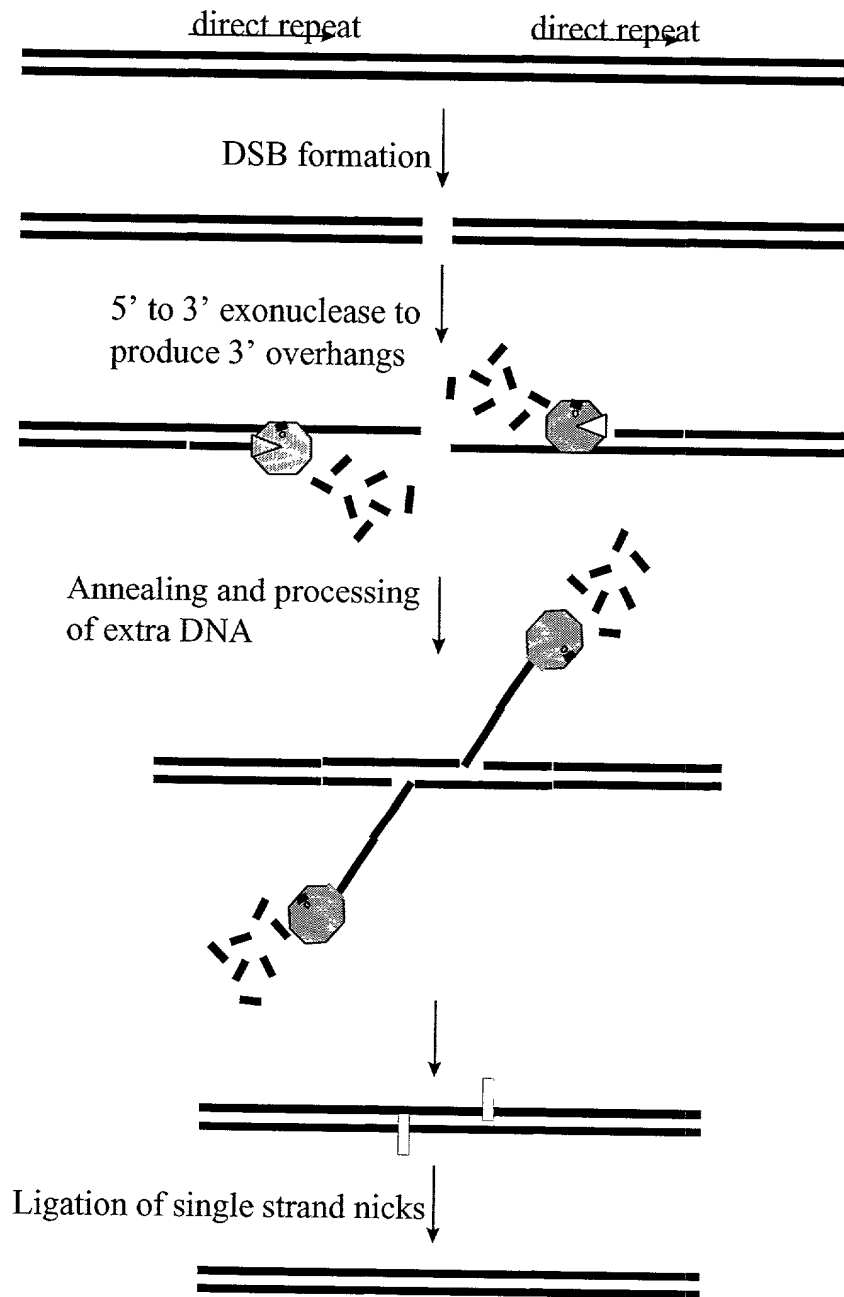


Figure 3. Single strand annealing model



00801364.030701

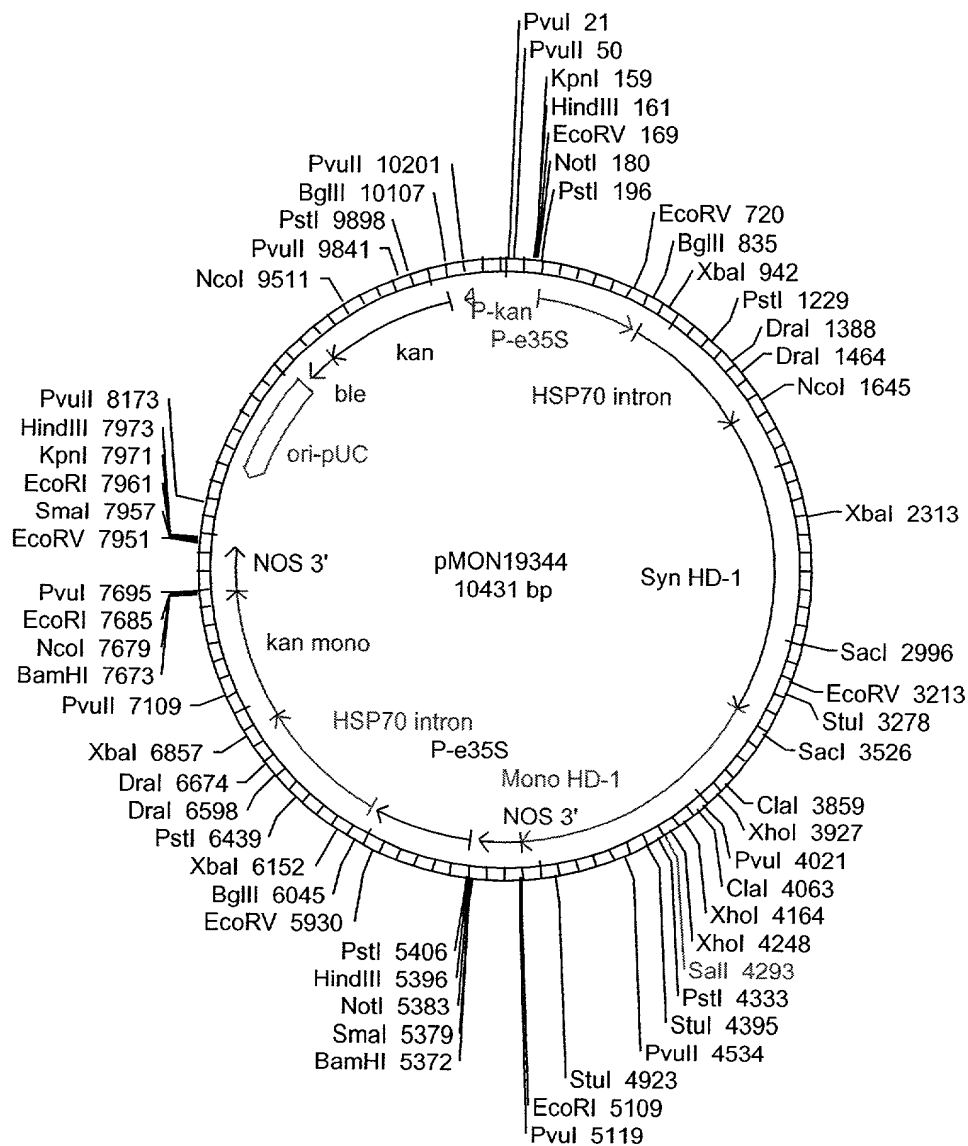
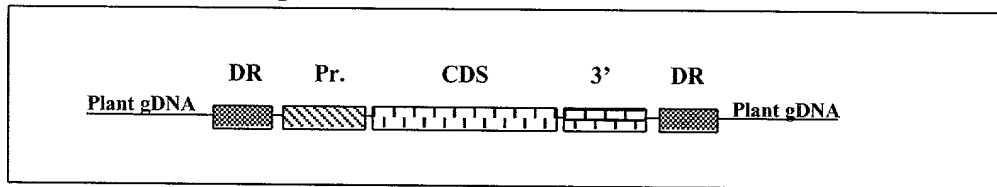


Figure 4.

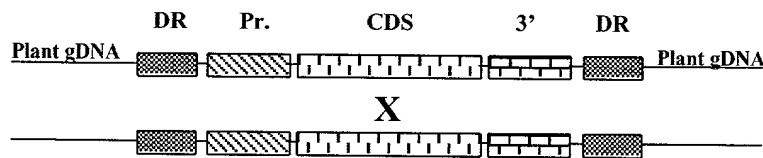
Direct Repeat Induced, Non-Reciprocal Recombination-Mediated Transgene Deletion

I. Hemizygous R₁ Transgenic Plant

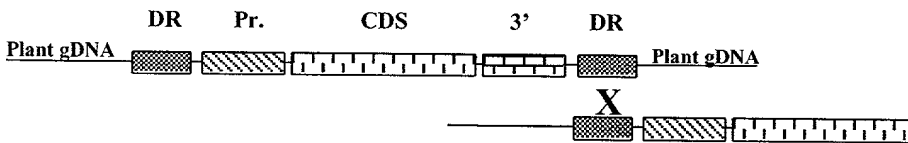


II. Homozygous S₁ Transgenic Plant at Meiosis

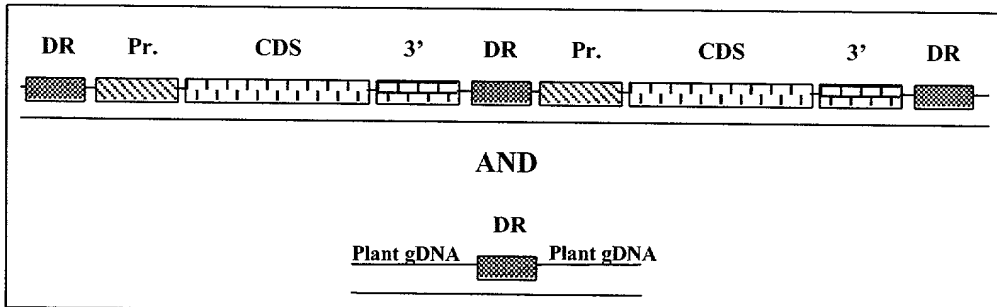
A. Reciprocal Recombination



B. Non-Reciprocal Recombination



III. F₁ Recombinant Progeny Plants



In the graphic illustration:

Plant gDNA = plant genomic DNA flanking the site of transgene integration
 DR = Direct Repeat
 Pr. = "Promoter"
 CDS = coding sequence
 3' = transcription terminator

Figure 5.

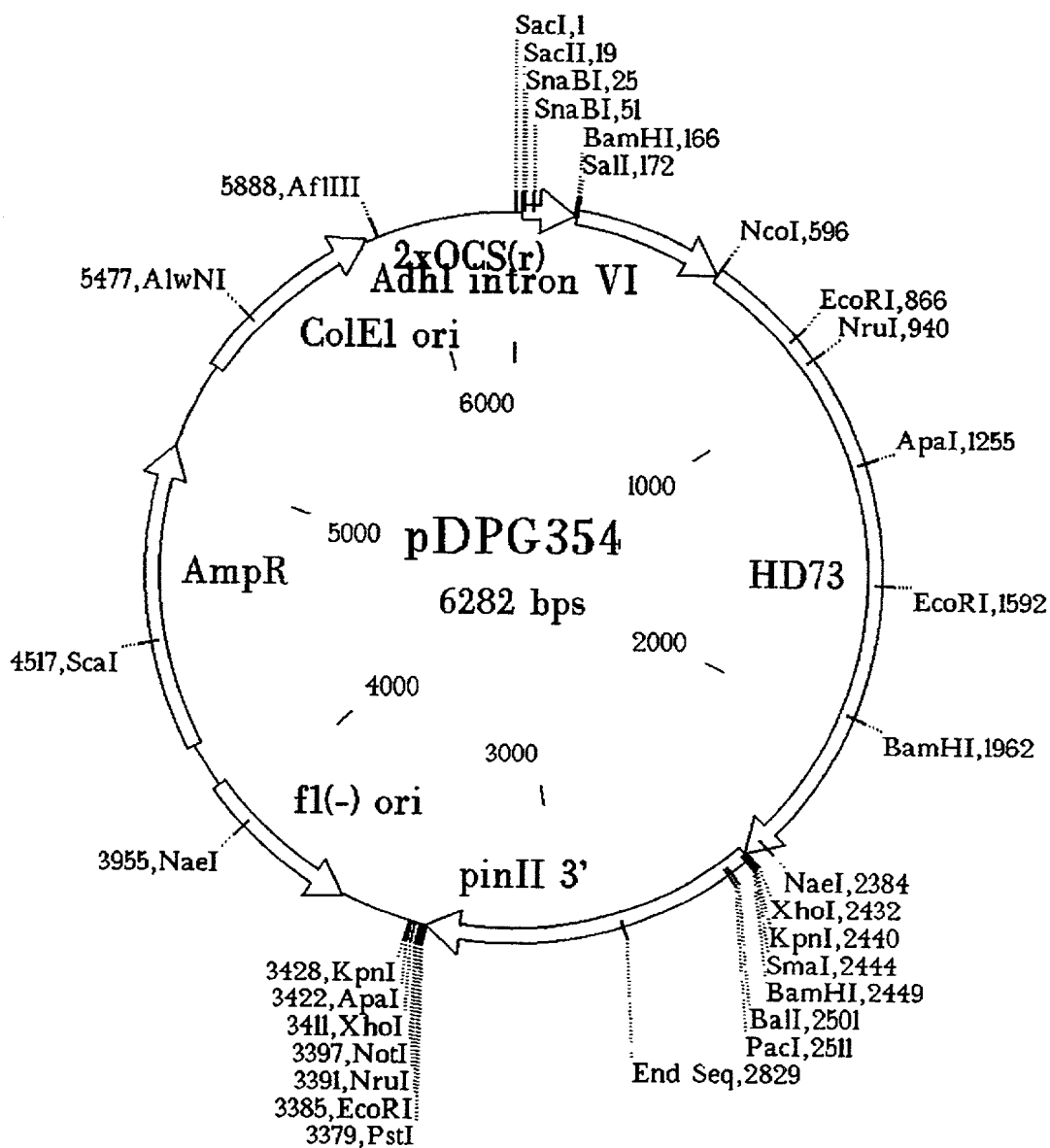


Figure 6.

Figure 7.

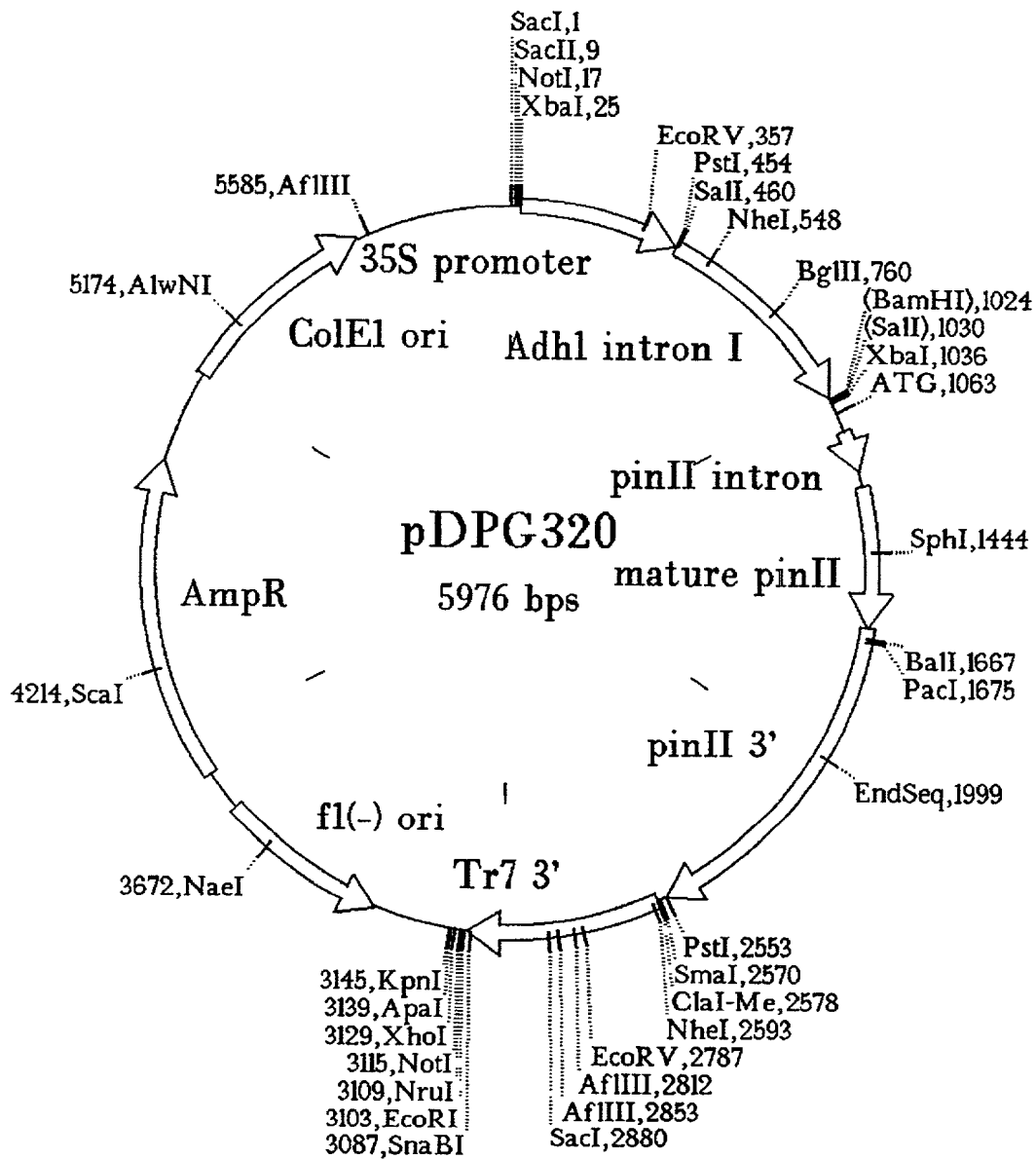


Figure 8.

DBT418 Transgene Insertion

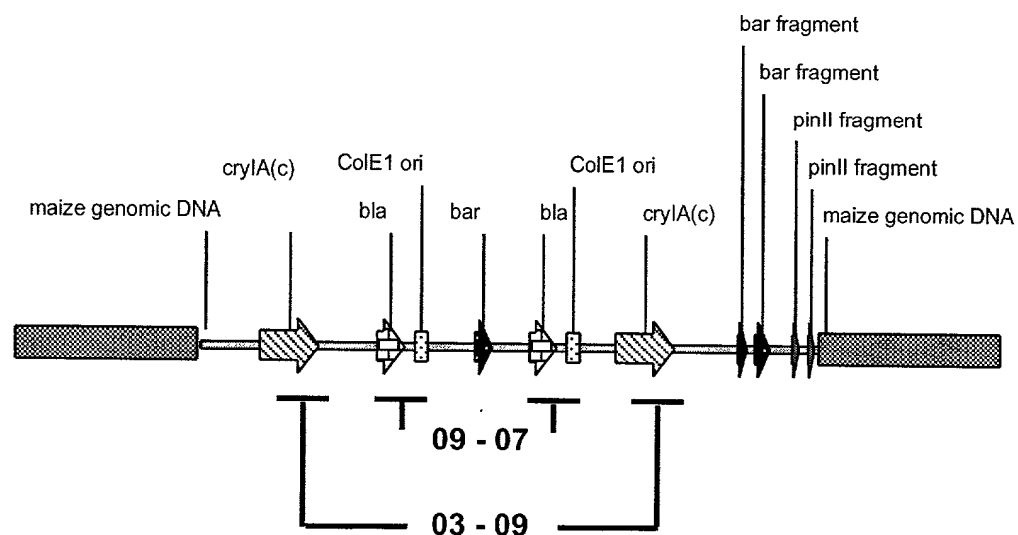
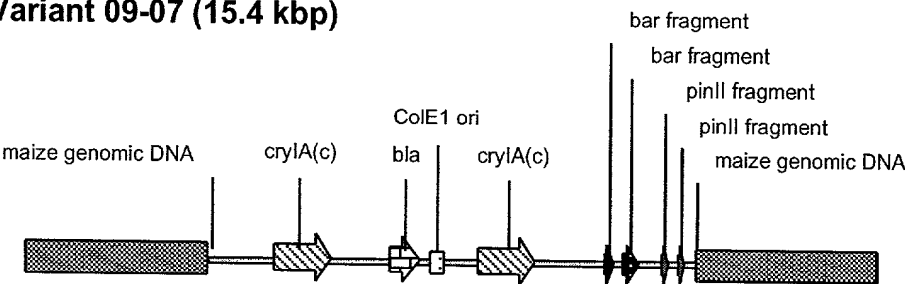


Figure 9.

09004561 030704
10000 T92000

DBT418 Altered Transgene Insertions

Variant 09-07 (15.4 kbp)



Variant 03-09 (9.2 kbp)

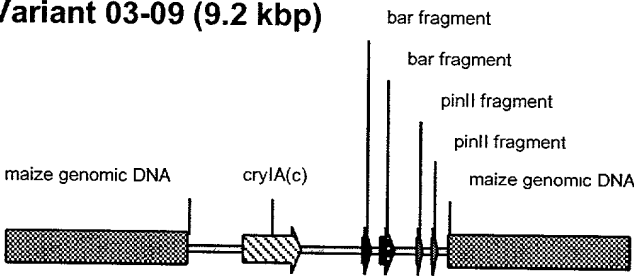
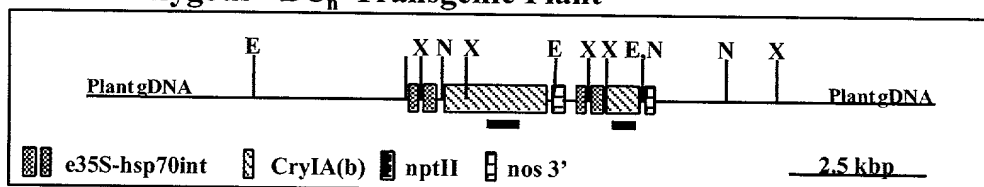


Figure 10.

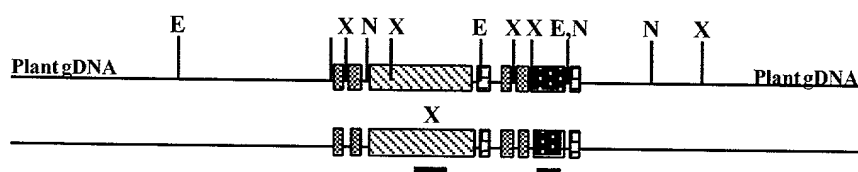
Non-Reciprocal Recombination-Mediated Transgene Deletion in MON849

I. Hemizygous BC_n Transgenic Plant



II. Homozygous S₁ Transgenic Plant at Meiosis

A. Reciprocal Recombination



B. Non-Reciprocal Recombination

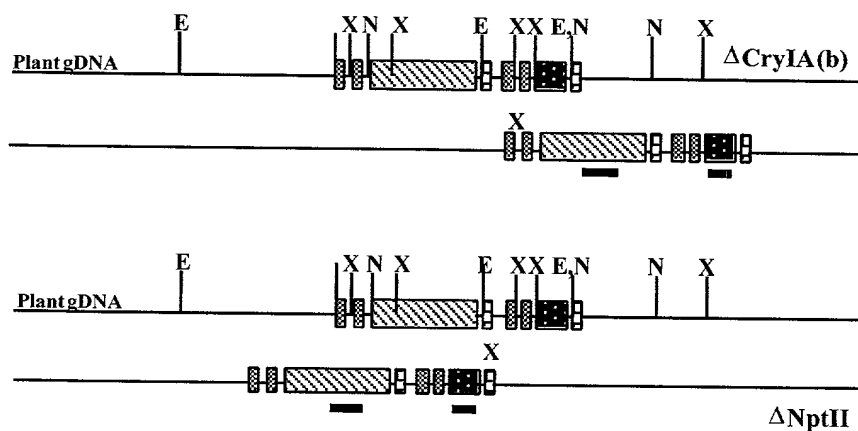
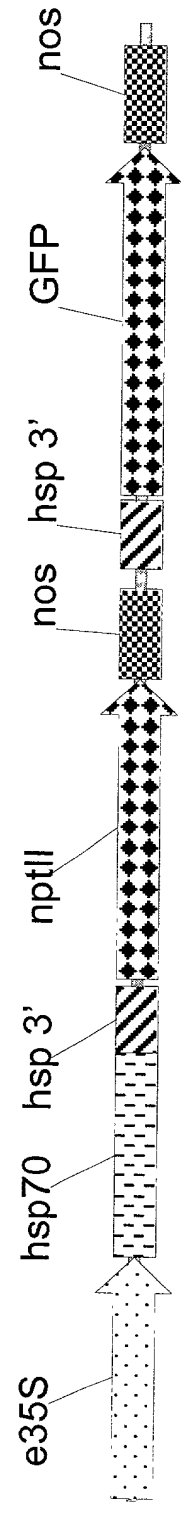


Figure 11.



pMON36133

Figure 12.

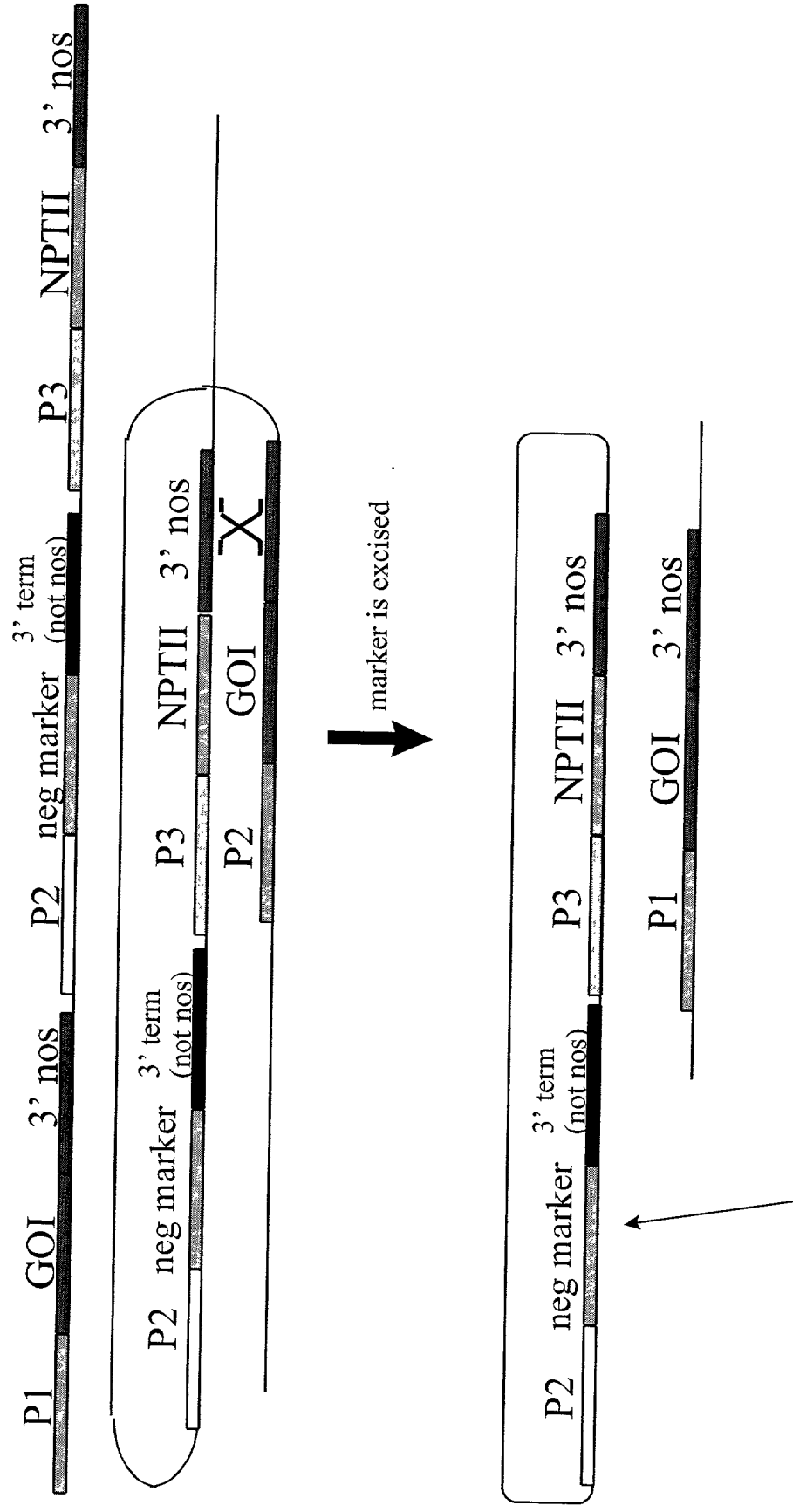


Figure 13